HISTORY OF THE ASSOCIATION OF NEUROLOGISTS OF THE REPUBLIC OF KAZAKHSTAN AND DEPARTMENT OF NERVOUS DISEASES

The Department of Nervous Diseases of KazNMU dates back since 1934. Professor M.H.Farizov was the initiator and organizer of the Republican scientific society of Neuropathologists and psychiatrists of Kazakhstan in 1964. Currently, the legal successor of this society is the Association of Neurologists of the Republic of Kazakhstan, which is currently headed by Professor E.S. Nurguzhaev. This organization systematically organizes scientific and practical conferences of great interest to science and healthcare. The staff of the department adequately represents neurological science at international forums, congresses, conferences. It is with this oldest Association of Neurologists of the Republic of Kazakhstan and the Department of Nervous Diseases that the history of the development of the neurological service of Kazakhstan is connected

Since the foundation of the department, its scientific problem has been the study of neuroinfections in Kazakhstan: tick-borne and malarial encephalitis, neurobrucelesis, damage to the nervous system in influenza (scientific supervisors E.M.Steblov and M.H.Farizov). Its organizer and head was Professor Evsey Moiseevich Steblov (1934-1956). He began working with one assistant and one laboratory assistant. The study of natural foci of tick-borne encephalitis in Kazakhstan, the peculiarities of epidemiology, the clinic of its course and outcomes have a definite significance for the practical health care of our republic. The clinical and epidemiological data obtained by the staff of the department (E.L.Falkova, M.S.Genina) were used in the preparation of methodological recommendations on tick-borne encephalitis in Kazakhstan.



Professor Evsey Moiseevich Steblov (Head of the department from 1934 to 1956)

During the WW2 the staff of the department (E.M.Steblov, R.G.Mandryko, ass. E.L.Falkova), while continuing to train medical personnel, simultaneously provided qualified consultations to rear hospitals located in Alma-Ata, and such as M.H.Farizov and assistant of the department K.V.Andreeva were at the forefront working in frontline hospitals. Many military awards marked their achievements during the difficult years of the war.

Professor E.M.Steblov's successor at the department was Professor Mukhametzhan Khakimovich Farizov (1957-1976). He was an experienced clinician, a participant in the WW2, a man with a wide range of scientific interests.



Professor Farizov Mukhametzhan Khakimovich (Head of the department from 1957 to 1976)

Later on, life put forward the problem of vascular diseases of the brain in the 1st place, and since 1960 this problem has taken a leading place in the scientific research of the department (scientific supervisor - M.H.Farizov). The staff of the department at that time took part in the all-Union topic, headed by the Institute of Neurology of the Academy of Medical Sciences, on the study of the epidemiology of vascular diseases of the brain, the study of the importance of genetic factors in the development and spread of acute cerebral circulatory disorders. Mukhametzhan Khakimovich was the initiator and organizer of the first neurovascular department in the Kazakh SSR for patients with acute cerebral circulatory disorders.

Under the guidance of Professor M.H.Farizov, 1 doctoral and 7 PhD dissertations were prepared. For about 10 years M.H.Farizov headed the Scientific Council of the Ministry of Health of Kazakhstan, for more than 15 years he was a member of the editorial board of the journal "Healthcare of Kazakhstan".

From January 1977 to August 2000, the head of the Department of Nervous Diseases was Professor Smagul Kaishibaevich Kaishibaev, MD. As the Department of Nervous Diseases became established, its clinical base expanded.



Professor Kaishibaev Smagul Kaishibaevich (Head of the Department from 1977 to 2000)

Since the late 1970s, the results of scientific research by the department's staff have been widely introduced into healthcare practice. At that time, methods such as serial angiography of cerebral vessels, the method of detecting "latent synkinesia" using an electromyograph, and echo-encephalography were used to diagnose acute disorders of cerebral circulation. For the same purpose, an original method for studying the physical condition of the contents of the craniospinal cavity was introduced, developed at the Research Institute of Regional Pathology under the guidance of corresponding member of the Academy of Sciences of the Kazakh SSR, Professor B.A.Atchabarov. The method of impedance control was used as one of the criteria for evaluating dehydration therapy of cerebral strokes. Acupuncture and hyperbaric oxygenation methods are used in the complex therapy of acute cerebral circulatory disorders.

Since 1980, changes in the autonomic nervous system in the initial manifestations of cerebrovascular pathology have been widely studied. The development of these issues was carried out

on the basis of a mutual cooperation agreement with the research institutes of regional pathology and Cardiology of the Ministry of Health of the Kazakh SSR.

Since the end of 1980, the staff of the department has been actively developing issues of early diagnosis and treatment of cerebral circulatory disorders, the consequences of traumatic brain injury and diabetic encephalopathy.

At that time, the staff of the department were based in the neurological departments of the Central City Clinical Hospital, 1 city Clinical Hospital, 7 city clinical Hospital and the Republican Children's Clinical Hospital Aksai, as well as the neurosurgical department of the regional clinical hospital.

In 2000, the department employed 19 employees (1 head of the department, 2 professors, 3 associate professors, 10 assistants, 1 senior laboratory assistant and 2 laboratory assistants).

Educational and methodological work in those years was carried out at the medical, pediatric, dental and sanitary-hygienic faculties. During the existence of the department, several tens of thousands of students, more than dozens of clinical residents, interns have been trained in the specialty "neuropathology", more than 200 experienced neuropathologists have been trained. The total number of printed scientific papers carried out by the staff of the department since its foundation is more than 500. Russian Russian and Kazakh Dictionary of Neurological terms, 11 collections, 8 monographs, more than 100 methodological recommendations, 3 textbooks, 2 textbooks for students in Russian and Kazakh languages, Russian-Kazakh dictionary of neurological terms, more than 10 copyright certificates for the invention and more than 30 rationalization proposals were published by 2000.

Scientific and practical activity of S.K.Kaishibaev is connected with the organization and development of methods for the diagnosis and treatment of disorders of cerebral circulation. 52 PhD and 17 doctoral dissertations were defended under the supervision of S.K.Kaishibaev. Five of his students head specialized departments in medical universities of the Republic.

For his services in scientific and practical work and the training of scientific and pedagogical personnel, Professor S.K.Kaishibaev was awarded the medals "For Labor Valor" (1967), "For valiant labor in commemoration of the 100th anniversary of the birth of V.I.Lenin" (1970), the badge "Excellent Student of Health of the USSR" (1971.), honorary diplomas of the Ministry of Higher Education of the USSR (1981), the Ministry of Health of the Kazakh SSR (1985), the Ministry of Health of the USSR (1991) and the jubilee medal "10 years of Independence of the Republic of Kazakhstan" (2001), "Honored Worker of the Republic of Kazakhstan".



Lecture by Professor S.K.Kaishibaev (1978)



Professor Kaishibaev S.K. examines a patient, 1978 (at the Kaishibaev S.K. center)



The staff of the Department of Nervous Diseases (1997)

From 2000 to 2004, the head of the department was Professor, MD Abenov Bulat Aminovich. Under the leadership of Professor B.A. Abeuov, the scientific and therapeutic and diagnostic activities of the Department of Nervous Diseases continued.



Professor Abilov Bulat Aminovich (Head of the Department from 2000 to 2004)

B.A.Abeuov was the initiator and organizer of the Association of Neurologists of Kazakhstan, which filled the information vacuum that developed after the collapse of the USSR by establishing extensive international relations. Even at that time, Bulat Amenovich, under the guidance of Professor S.K.Kaishibaev, emphasized international cooperation, therefore, since the beginning of the 2000s,

conferences with international participation with the involvement of foreign specialists in the field of neurology began to be held at the department.

Professor B.A.Abeuov successfully combined his scientific and pedagogical activities with medical work, consulting patients in leading clinics in Almaty, as well as in regional medical institutions.

During the years of his work at the university, 1 doctoral and 10 PhD dissertations were defended under the guidance of Professor B.A.Abeuov. Bulat Aminovich Abeuov has published more than 120 scientific papers, including 4 monographs and several methodological manuals. 5 inventions and 15 rational proposals were patented, for which he was awarded the title of "Inventor of the USSR".

Since October 2004 Until 2018, the Department of Nervous Diseases of the Kazakh National Medical University named after S.D. Asfendiyarov was headed by Professor, MD Nurguzhaev Yerkyn Smagulovich. For many years, the department has been making a great contribution to the work of the neurological service of clinics in Almaty and the Republic of Kazakhstan as a whole.



Professor Nurguzhaev Yerkyn Smagulovich (Head of the Department from 2004-2018)

The scientific and practical activities of the Department of Nervous Diseases, headed by Professor E.S.Nurguzhaev, are related to the study and implementation of methods for the diagnosis and treatment of cerebrovascular diseases, the consequences of traumatic brain injuries, diseases of the peripheral nervous system, demyelinating diseases of the nervous system, somatoneurology, the results of which are completed by scientific and practical conferences.

Associate professors Nina Konstantinovna Klipitskaya, Flora Akanovna Musabaeva, Irina Mukhametzhanovna Kalmeneva made a great contribution to the activities of the department and the university, being mentors to assistants, clinical residents, interns, and novice neurologists.

Under his leadership, 3 doctors of medical sciences and 12 candidates of medical sciences are protected. It should be noted that in the autumn of 2013, the first defense of the dissertation for the degree of Doctor of Philosophy (PhD) by S.B. Yerkebayeva took place, the scientific supervisor of which was Professor E.S. Nurguzhaev.

From 2018 to the present, the Department of Nervous Diseases of the Kazakh National Medical University named after S.D. Asfendiyarov is headed by Professor, MD, Turuspekova Saule Tleubergenovna.

Turuspekova Saule Tleubergenovna is a doctor of medical sciences, a neurologist of the highest category. Laureate of the state scholarship for young talented scientists of the Ministry of Science of the Republic of Kazakhstan. Winner of the nomination "Pride of the University" and "National Pride of Kazakhstan" Badge, certificate, pedestal on the Walk of Fame for outstanding contribution to the development of healthcare and medical science of the Republic of Kazakhstan and strengthening the image of the university. She was awarded the "Success of the Year" medal (2015).

The personal physician of Kazakh cosmonaut Aydin Aimbetov.

Participant of the international Scientific and Technical Research project within the framework of the program "Space Research and Experiments of the Republic of Kazakhstan on the

International space Station during the flight of a Kazakhstani cosmonaut": — "Investigation of the influence of space flight factors on the activity of an astronaut based on the study of the effect of ionizing gamma radiation of the natural radiation background on the body" ("Matryoshka-R").

Author of over 180 scientific publications, the results of which were reported at prestigious international conferences and congresses in Kazakhstan, Russia, Ukraine, Uzbekistan, Tajikistan, Kyrgyzstan, Bulgaria, Turkey, Germany, Italy, Greece, Switzerland, Puerto Rico, USA, France, Great Britain, Thailand, Portugal, Hungary, Denmark, Spain, India, Austria, Argentina, the Netherlands, Poland, Sweden

Member of the Association of Neurologists of Kazakhstan, ESO, WSO, EAN, AD/PD, Guidepoint Advisors, League of Neurologists, WFN

Member of the Editorial Board of the Astrakhan Medical Journal, ISSN 1992-6499

Member of the Editorial Board of the Journal Clinical Practice (FMBA of the Russian Federation) ISSN 2220-3095.

President of Save Our Brain. Central Asia Research Fund»

Professor S.T. Turuspekova, heading the Department of Nervous Diseases, shows great organizational skills, which were characteristic of her in previous years. The department is doing a lot of work on international cooperation, increasing the scientific potential of the department, updating methodological material for both students and teachers.



Professor, doctor of medical science, Turuspekova Saule Tleubergenovna (Head of the Department from 2018 to the present)

Association today

Head of the Association of Neurologists of the Republic of Kazakhstan : MD, Professor Nurguzhaev Yerkyn Smagulovich

Professors: Doctor of Medical Sciences, Turusbekova Saule Tleubergenovna, Doctor of Medical Sciences Raimkulov Bekmurat Nametovich, Doctor of Medical Sciences Idrisova Zhannat Rustemovna, Doctor of Medical Sciences Mukhambetova Gulnar Amerzaevna

Associate professors: Candidate of Medical Sciences Nurzhanova Roza Baltabaevna, Candidate of Medical Sciences Atantaeva Elmira Balabekova, Candidate of Medical Sciences Safina Svetlana Gabdulvalevna, Candidate of Medical Sciences Mitrokhin Dmitry Alekseevich , Candidate of Medical Sciences Izbasarova Akmaral Shaimerdenovna, PhD Almakhanova Klara Kanatovna.

Assistant: Candidate of Medical Sciences Iliev Renat Tuglukovich, Candidate of Medical Sciences Nurmukhambetova Bakytgul Rakhimbekovna, PhD Tsoi Radmila Timsonovna, Demesinova Bayan Kosbolovna, Nurakhmet Adilya Nurakhmetovna, Aralbaeva Asel Dosymkhanovna, Kemelbekova Moldir, Mamashaev Nurmukhamed Karimzhanovich, Oraz Sayat Samatuly



The staff of the Association of Neurologists (2024)



Association staff, residents and invited foreign guests at the second Central Asian Neurological Conference (2024)



The staff of the Department of Nervous Diseases at the 4th International Congress of the Turkic World on Multiple Sclerosis (2024)



Staff of the Department of Nervous Diseases together with doctors of the State Clinical Hospital No. 7 in Almaty at the conference dedicated to the World Stroke Day (2022)





Olympiad organized by Professor Mukhambetova G.A. on orphan diseases among residents of the first and second years of study (2022)

Until 2011, the Department of Nervous Diseases taught the following disciplines in a linear and credit form of education: 3rd, 4th, 5th, 6th year students in the specialty 051106 "Oriental Medicine"; 5th year students 051301 "General Medicine" in the discipline "Neurology"; 5th year students in the specialty 051101 "Medicine" (GOSO-2005) "Neurology"; 3 courses in the specialty "Dentistry" in the discipline "Neurology". From 2009 academic year to 2013, 2nd year students of specialty 051101 "Nursing" were engaged in the discipline "Nursing in neurology".

Due to the adoption of the Bologna Declaration, the university gradually switched to a new type of education. Since 2012, the Department of Nervous Diseases has been teaching the credit system (bachelor's degree) for 5th year students of the specialty 051301 "General Medicine" in the discipline "Neurology" and 3rd year students of the specialty "Dentistry".

Currently, the department provides training in the following specialties: Bachelor's degree 5B130200 – "Dentistry", 5B130100 – "General Medicine", 5B130300 – "Pediatrics". Internship (basic disciplines): 5B130100 – "General medicine" in the direction of "General medical practice". Residency R 037 – "Neurology, including children's". Master's and doctoral studies.

In 2021, the Association of Heads of Educational Institutions Education Kazakhstan awarded the Grand Prix to the Department of Nervous Diseases of KazNMU based on the results of a remote competition for the title of "Best Department -2021" in the field of Clinical Medicine

По итогам оценки ключевых показателей деятельности кафедра нервных болезней была признана «Лидером КазНМУ 2023 года»

For 3 academic years, the volume of study hours of the Department of "Nervous Diseases" is 39627 hours. During this period, educational work was carried out with 5,806 students. Implemented innovative learning technologies

— video lectures were created by associate professor Atantayeva E.B. on the topics "Motor system", "Sensitivity" were compiled for 5th year students of the Faculty of OM MMF in the discipline

"Fundamentals of Neurology, including children's", this topic is included in the syllabus, a lecture is presented in English, there is an act of implementation (protocol No. 3 of 10/20/2020d.)

— TBL practical classes for interns of the 6th year of the OM ORP in the discipline: Adult, children's neurology" on the topics: "Differential diagnosis and treatment of degenerative diseases of the nervous system (Parkinson's disease, Huntington's chorea, hepatocerebral dystrophy)" and "Principles of differential diagnosis and treatment of diseases of the peripheral nervous system" are developed in order to use innovative techniques for a successful learning process. The TBL teaching methodology is a borrowed program (the original technology is called Team-based learning (TBL), authored by Larry Michaelsen (USA), there is an act of implementation (Protocol 4 of 11/18/2020).

For the first time, a joint master's degree program was created with Al Farabi Kazakh National University "7M01106 - Medical and pedagogical support for inclusive education", syllabuses on disciplines were compiled:

- Anatomical and physiological foundations of the functioning of the nervous system;
- Disorders of the formation of psycho-speech functions in childhood;
- Functional (neurotic) disorders in childhood;
- Medical rehabilitation and therapeutic work in diseases of the nervous system;
- * Diagnostics and clinical research in inclusive education.

Scientific/research programs and projects, program manager

- 1. The prevalence of cognitive impairment and dementia in Central Asian countries. Supervisor: Turuspekova S.T.
- 2. "Assessment of the quality of life, anxiety level and cognitive sphere in patients with polyradioloneuropathies" Supervisor: Nurguzhaev E.S. LEK No.6 (97) dated 05/27/2020
- 3. R01.KAZAC (Kazakhstan study of air pollution and cognitive impairment) Coexecutive director: Turuspekova Saule Tleubergenovna
- 4. A study to evaluate the effectiveness and safety of the use of Mexidol® solution for intravenous and intramuscular administration, 50 mg/ml (NPC PHARMASOFT LLC, Russia) and Mexidol® FORTE 250 film-coated tablets, 250 mg (NPC PHARMASOFT LLC, Russia) with their sequential use in patients in the acute and early recovery periods. Head: Nurguzhaev E.S.
- 5. Development of approaches to assess the risk of severe acute coronavirus infection COVID-19 and postcovid syndrome to reduce the preventable causes of complications and disability. Section: Spectrum of neurological disorders in COVID-19. Head: Turuspekova Saule Tleubergenovna
- 6. The aim of the project is to create research capacity to study cognitive impairment (CI) and their risk factors in Kazakhstan. Chief Researcher: Sekikawa, Akira, Program Manager Kimberly Gray Chief researchers of NAO "Kazakhstan": S.T. Turuspekova, Astana National Laboratory: A. Supyev
- 7. Introduction of a system of diagnosis, treatment and rehabilitation for certain orphan diseases with neurological manifestations in children. Head: Idrisova J.R.
- 8. The project "Comprehensive assessment of the state of the environment and the health of the population of Kentau and adjacent settlements". Participant: Kaldybekova S.K. Assistant of the Department of Nervous Diseases with a course in neurosurgery
- 9. Analysis of the use of traditional medicine methods in the treatment of epilepsy in different countries

Projects are planned

- 1. Possibilities of correction of adaptive mechanisms in patients with waxy syndrome
- 2. Liposomal technologies in neurorehabilitation
- 3. Biochemical markers in solving problems of chronic cerebral ischemia and ways to correct them



Head of the department Turuspekova S.T. with future young neurologists (2024)

The staff of the Department of Nervous Diseases work in constant contact with practical health authorities, conduct medical work in basic clinics, provide neurological consultations to patients of all departments at the appropriate qualified level. All employees of the department are constantly actively involved in the social life of the university.

The establishment and development of neuropathology in the Republic of Kazakhstan is connected with the organization of the Department of Nervous Diseases of the Kazakh National Medical University, and the most important of them is the successful training of highly qualified specialist doctors for all regions of Kazakhstan, experienced teachers of higher education and the education of neurologists with a broad outlook.